



# ***Global Aviation Information Network***

September 2001

## **Description of GAIN**

The Global Aviation Information Network is an industry-led international coalition of airlines, manufacturers, employee groups, governments and other aviation organizations formed to promote and facilitate the voluntary collection and sharing of safety information by and among users in the international aviation community to improve aviation safety. Nearly 600 aviation safety professionals from 37 countries have participated in the GAIN program.

The GAIN concept was proposed in May 1996 as a way to significantly improve aviation safety through the enhanced use of safety information. The GAIN philosophy is that the collection, analysis, and sharing of safety information using advanced technologies in a jeopardy-free environment will illuminate safety concerns and permit identification and implementation of cost-effective mitigations.

## **GAIN World Conferences**

The first GAIN World Conference, sponsored by the FAA, was held in Cambridge, Massachusetts, in October 1996 and attracted 153 participants. This first conference focused on “brainstorming” sessions in which participants shared ideas on how the GAIN concept should move forward and helped create the foundation for GAIN.

The second conference was held in London, England, in May 1997. It was jointly sponsored by the FAA, the UK CAA, and the Royal Aeronautical Society and attracted 166 participants. At this second conference, GAIN participants discussed some existing information sharing success stories, impediments to implementing GAIN, and potential solutions.

GAIN momentum continued to build and the Third GAIN World Conference was held in Long Beach, CA, in November 1998. Sponsored by United Airlines, this conference attracted approximately 200 people representing over 100 aviation organizations from 17 countries. Even more impressive, 33 airlines attended this third gathering of aviation safety professionals from around the world. A major activity at this conference was a collaborative discussion session among all participants that lead to the documentation of desired outcomes for GAIN and suggested tasks to achieve those outcomes. This activity spurred the creation of charters for four GAIN Working Groups, whose subsequent accomplishments have been recognized by the aviation community.

These Working Group accomplishments were the major topics of the Fourth GAIN World Conference, held in Paris, France, June 14-15, 2000. Hosted by Air France and Airbus Industrie, this conference attracted more than 175 aviation safety professionals from 28 airlines, 8 airframe and engine manufacturers, 5 avionics suppliers, 20 government organizations, and 41 other aviation organizations. People from 23 countries attended the conference.

True to the conference theme of “Safety Information Sharing: Concept to Products,” several initial products from the implementation of GAIN were presented to conference participants to expand the collection, analysis, and sharing of aviation safety information. The Aviation Operator Safety Practices Working Group provided every conference attendee with a CD-ROM containing a 236-page “Operator’s Flight Safety Handbook” and discussed how to use it most effectively. The Analytical Methods and Tools Working Group demonstrated various analytical tools that are being used by airlines to extract useable information from various types of safety data. The Global Information Sharing Prototypes Working Group demonstrated two prototype systems that can securely exchange airline safety event reports within trusted groups in near-real time. Conference workshops also featured a demonstration of a GAIN web site with links to 100 publicly available aviation safety data and information web sites from around the world and descriptions of about 60 methods and tools that can be used to analyze safety data. The Reducing Impediments Working Group announced at the conference that their efforts resulted in a recommendation in ICAO Annex 13 that “States should promote the establishment of safety information sharing networks among all users of the aviation system and should facilitate the free exchange of information on actual and potential safety deficiencies.”

The Fifth GAIN World Conference is now planned for December 5-6, 2001 at the Hilton Miami Airport Hotel in sunny Miami, Florida. Industry leaders Delta Airlines and Airbus will co-host this conference with the theme “Safety Information Sharing: Collaboration, Innovation, and Implementation.” Leaders from many diverse aviation organizations from around the world will share their expertise in presentations and workshops that illustrate the value of collaboration in developing solutions to aviation safety information issues; demonstrate innovative projects and products to enhance the collection, analysis and sharing of aviation safety information; and show how operators are implementing those products and explain the benefits they are realizing.

### **GAIN Organization**

The GAIN organization consists of the Steering Committee, Working Groups, Program Office, and a newly formed Government Support Team.

The **Steering Committee** consists of industry stakeholders (airlines, manufacturers, employee groups and their trade associations) that set high-level GAIN policy, issue charters to direct the Working Groups, and guide the Program Office. Represented on the GAIN Steering Committee are Air France, British Airways, Delta Airlines, Japan Airlines, Airbus Industrie, The Boeing Company, Air Line Pilots Association (ALPA), Air Transport Association of America (ATA), International Air Transport Association (IATA), Flight Safety Foundation, International Association of Machinists (IAM), National Business Aviation Association (NBAA), National Air Traffic Controller Association (NATCA), and the U.S. Military (Navy Aviation Safety). The FAA serves as an ex-officio member of the Committee. Steve Predmore, Director, Safety Performance & Quality Assurance at Delta Airlines chairs the Steering Committee and Bertrand de Courville, Flight Safety Manager at Air France is Vice-Chair. The Steering Committee meets on a quarterly basis.

The **Executive Committee** is comprised of several Steering Committee members and acts on behalf of the whole Steering Committee on administrative matters or as directed.

The **Working Groups** are interdisciplinary industry/government teams that work GAIN issues in a largely autonomous fashion, within the charters established for them by the Steering Committee. Working Groups are discussed further below.

The **Program Office** provides technical and administrative support to the Steering Committee, Working Groups, and the Government Support Team.

The **Government Support Team (GST)** consists of representatives from government organizations that work together to foster GAIN goals and reduce impediments to sharing. The GST promotes and facilitates voluntary collection and sharing of safety information in their respective countries and regions; works to eliminate legal and organizational barriers that discourage the collection and sharing of safety information; and encourages government organizations to provide technical and administrative resources to support the development and implementation of GAIN.

### **2000-2001 GAIN Action Plan**

The GAIN Steering Committee has developed a 2000-2001 GAIN Action Plan that builds on the initial accomplishments of the GAIN program and incorporates recent suggestions from GAIN participants. This plan lays out specific tasks to be accomplished or initiated by 2001 that demonstrate how GAIN will:

- A) Assist aviation operators in obtaining, implementing & sharing industry "best practices"  
*(assigned to GAIN Working Group A)*
- B) Foster the use of existing analytical methods and tools and the development of new tools  
*(assigned to GAIN Working Group B)*
- C) Promote and facilitate the development and implementation of systems to support the global sharing of aviation safety information  
*(assigned to GAIN Working Group C)*
- D) Foster GAIN goals and reduce impediments to sharing  
*(assigned to Government Support Team)*
- E) Support the GAIN program and infrastructure and try to expand it  
*(assigned to GAIN Steering Committee).*

### **GAIN Working Groups**

The three GAIN Working Groups (WGs) will assist the Steering Committee in implementing the action plan. The Steering Committee gives each WG a Charter to define its responsibilities and the WG develops a Work Plan to accomplish the tasks laid out in the Charter. Each WG meets every 2 to 3 months to plan activities, report progress, and exchange ideas. WG members perform the work to create GAIN products between meetings. The WGs report progress and concerns back to the Steering Committee.

The accomplishments and proposed tasks for the GAIN WGs are as follows:

**WG A: Aviation Operator Safety Practices** assists aviation operators in obtaining, implementing and sharing industry "best practices." WG A developed the Operator's Flight Safety Handbook (OFSH) to help operators start, improve, or expand their internal safety programs. The OFSH includes commonly accepted standards and best operating practices, methods, procedures, tools, and guidelines for use by flight safety officers. Over 2,300 OFSH CDs have been distributed to industry and government organizations. During 2001, the working group has been developing a stand-alone Cabin Safety Compendium and an appendix to the OFSH on the "business case" for establishing or enhancing an airline flight safety program.

**WG B: Analytical Methods and Tools** fosters the use of existing analytical methods and tools and the development of new tools. WG B conducted an initial survey of airline flight safety offices to determine their safety analysis needs, then prepared descriptions of over 60 existing methods and

tools that can potentially meet those needs. The group also developed and conducted a 3-stage review of the more promising analytical tools for Relevance & Maturity, Value, and Operational Readiness. This last stage involved partnering with airlines to review tool usefulness and usability. During 2001, the working group has been gathering additional information on the capabilities and needs of airline safety managers in the area of analyzing safety information; preparing a report on methods and tools airline flight safety analysis; partnering with airlines to assess the operational readiness of text mining and data mining tools; and beginning to address analysis tools for analysis of safety of the air traffic operations.

**WG C: Global Information Sharing Prototypes** promotes and facilitates the development and implementation of systems to support the global sharing of aviation safety information. WG C developed two prototype systems for exchanging airline safety event reports among trusted groups in near-real time. During 2001, the working group has been implementing the two prototype systems at and working with the participating airlines to conduct operational demonstrations. The group has also been identifying and documenting other on-going or planned “automated” aviation safety information sharing activities.

### **Prospects Through 2001**

With the 2000-2001 GAIN Action Plan established by the Steering Committee, three working groups working GAIN issues, and a Government Support Team to help foster GAIN goals and reduce impediments to sharing, the prospects for GAIN are very bright. GAIN is no longer “just a concept” but is a robust program producing products that promote and facilitate the voluntary collection and sharing of safety information. With continued commitment and hard work, GAIN will continue to make impressive progress as we move toward the Fifth GAIN World Conference, to be held December 5-6, 2001 at the Hilton Miami Airport Hotel in Miami.

### **Invitation to Participate**

Through the hard work of the individuals on the GAIN Working Groups, GAIN has made substantial progress, but much remains to be done. Interested volunteers from all aspects of the aviation safety community are encouraged to participate on these working groups, where a challenging and rewarding experience is all but guaranteed. Interested parties can add their name to the GAIN contact list and sign up for a GAIN Working group, as well as find additional information about the GAIN program, at the GAIN web-site:

***[www.gainweb.org](http://www.gainweb.org)***

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